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The iron law of hierarchy?

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Table 1. Variables included in analysis: average characteristics of applicants and entrants per institution, subject and cohort

		Applicants				Entrants		
	% with characteristics	Mean	Std. Deviation	Extraction communalities		Mean	Std. Deviation	Extraction communalities
All	Overseas	7.38	8.34	0.73		6.27	8.91	0.61
	EU	5.98	5.01	0.64		4.84	5.49	0.61
	Female	53.15	20.43	0.70		53.37	20.99	0.58
	Under 21	79.53	12.23	0.56		74.73	15.81	0.56
UK-domiciled	RUK	11.15	16.10	0.37		8.78	14.04	0.21
	Outside region	53.99	22.04	0.65		45.73	23.35	0.41
	Indian	4.00	5.08	0.80		3.81	5.82	0.71
	Pakistani	2.73	3.87	0.77		2.46	4.37	0.57
	Bangladeshi	0.92	1.52	0.73		0.84	1.80	0.59
	Chinese	1.02	1.09	0.68		1.00	1.51	0.50
	Asian - other	1.54	2.12	0.77		1.46	2.44	0.64
	Caribbean	1.34	1.92	0.80		1.24	2.29	0.64
	African	3.72	5.62	0.77		3.19	5.71	0.70
	Mixed/other	3.30	2.66	0.80		3.23	3.12	0.71
UK-domiciled under-21s	Social Class 1	18.94	8.31	0.86		19.16	10.20	0.78
	Social Class 4	27.34	8.33	0.86		27.15	10.41	0.76
	From FE	26.06	16.00	0.65		26.71	19.02	0.46
	From independent school	11.27	10.62	0.75		11.70	12.82	0.71
	Prior qualifications: mean normal score	-0.13	0.57	0.87		-0.08	0.71	0.83
<i>N of cases (institution x subject x cohort)</i>		<i>N=4309</i>				<i>N=4381</i>		

Table 2. The dimensions of institutional and subject variation in UK higher education: factor loadings on rotated component matrix (analysis based on applicants and entrants respectively)

	Applicants				
	1 High status	2 Black & Bangladeshi	3 Asian	4 Male, overseas, Chinese	5 EU & RUK
Overseas	0.36	0.24	0.23	0.67	0.18
EU	0.19	0.17	-0.09	0.32	0.68
Female	0.04	0.12	-0.04	-0.83	0.02
Under 21	0.43	-0.50	-0.06	0.19	-0.29
RUK	0.11	-0.35	-0.15	-0.01	0.46
Outside region	0.50	-0.04	-0.17	0.22	-0.57
Indian	0.09	0.31	0.80	0.19	-0.15
Pakistani	-0.10	0.15	0.86	0.02	-0.02
Bangladeshi	-0.11	0.65	0.54	0.11	0.03
Chinese	0.33	0.26	0.42	0.57	0.05
Asian - other	0.17	0.59	0.58	0.21	0.08
Caribbean	-0.27	0.84	0.04	-0.01	-0.14
African	-0.16	0.82	0.26	0.02	0.08
Mixed/other	0.20	0.84	0.21	0.08	-0.03
Social Class 1	0.91	-0.02	0.03	0.15	0.03
Social Class 4	-0.90	0.12	0.16	-0.12	0.04
From FE	-0.71	0.05	-0.11	0.20	-0.30
From indep	0.85	-0.02	0.03	0.16	-0.05
Prior quals	0.92	-0.12	0.07	0.07	0.06
<i>% variance</i>	<i>24.40</i>	<i>18.63</i>	<i>12.93</i>	<i>9.75</i>	<i>6.74</i>

	Entrants			
	1 High status	2 Black & Bangladeshi	3 Asian	4 Male, EU, overseas, Chinese
Overseas	0.31	0.15	0.18	0.68
EU	0.00	0.25	-0.26	0.69
Female	0.07	0.23	-0.16	-0.71
Under 21	0.62	-0.39	0.11	0.05
RUK	0.13	-0.15	-0.39	0.14
Outside region	0.63	-0.10	0.01	-0.01
Indian	0.13	0.19	0.80	0.12
Pakistani	-0.14	0.12	0.73	0.06
Bangladeshi	-0.11	0.54	0.53	0.09
Chinese	0.30	0.14	0.43	0.46
Asian-other	0.13	0.45	0.61	0.22
Caribbean	-0.25	0.73	0.18	-0.07
African	-0.21	0.75	0.29	0.10
Mixed/other	0.16	0.77	0.28	0.09
Social Class 1	0.87	0.00	-0.01	0.14
Social Class 4	-0.85	0.07	0.15	-0.07
From FE	-0.67	-0.05	0.06	-0.03
From indep	0.84	-0.02	0.03	0.10
Prior quals	0.91	-0.08	-0.01	0.05
<i>% variance</i>	<i>24.47</i>	<i>13.67</i>	<i>13.26</i>	<i>9.52</i>

Table 3. Average component scores by institutional sector, subject area, cohort and location (components based on entrants)

		1 High status	2 Black & Bangla-deshi	3 Asian	4 Male, EU, overseas Chinese
Type of institution	Original Russell Grp	1.44	-0.14	0.06	0.08
	Other pre-1992 university	0.45	-0.07	0.04	0.24
	Post-1992 university	-0.61	0.16	0.06	-0.09
	Other HEI	-0.35	-0.14	-0.21	-0.22
Subject area	Medicine & Vet Med	0.74	-0.08	-0.02	-0.30
	Subjects allied to medicine	-0.10	0.37	0.09	-0.63
	Sciences	-0.15	-0.25	0.26	0.09
	Engineering & technology	-0.23	-0.21	0.07	1.47
	Social science & law	0.00	0.09	0.02	-0.06
	Arts	0.10	-0.05	-0.39	-0.49
	Other	-0.06	0.36	0.04	-0.04
Cohort	1996	-0.14	-0.37	-0.01	0.02
	2000	-0.22	-0.43	0.16	0.02
	2004	0.07	0.03	0.02	0.00
	2006	0.05	0.15	0.00	0.02
	2008	0.04	0.27	-0.04	-0.05
	2010	0.19	0.33	-0.12	-0.01
Location	London	0.04	1.46	0.70	0.18
	Rest of England	0.06	-0.25	0.08	-0.13
	Wales	-0.37	-0.42	-0.86	0.24
	Northern Ireland	-0.40	-0.58	-0.61	-0.04
	Scotland	-0.05	-0.30	-0.69	0.33

Table 4. Components from separate analyses based on entrants to HEIs in England, Wales and Scotland

	England			
	1	2	3	4
Overseas	0.27	0.12	0.21	0.71
EU	0.04	0.26	-0.15	0.72
Female	0.07	0.23	-0.15	-0.71
Under 21	0.60	-0.44	0.10	0.09
RUK	0.23	-0.36	-0.25	0.14
Outside region	0.69	-0.30	-0.20	0.11
Indian	0.10	0.15	0.81	0.11
Pakistani	-0.18	0.09	0.76	0.01
Bangladeshi	-0.12	0.52	0.54	0.08
Chinese	0.31	0.14	0.41	0.47
Asian - other	0.13	0.45	0.62	0.22
Caribbean	-0.29	0.72	0.07	0.00
African	-0.22	0.74	0.24	0.14
Mixed/other	0.15	0.79	0.22	0.12
Social Class 1	0.88	-0.04	0.02	0.13
Social Class 4	-0.85	0.12	0.14	-0.09
From FE	-0.73	-0.08	-0.06	0.06
From indep sch	0.84	-0.08	0.03	0.11
Prior quals	0.91	-0.12	0.04	0.06
% variance	25.59	14.85	12.70	10.16

Wales			
1	2	3	4
0.32	0.37	0.31	0.31
0.06	-0.03	-0.15	0.61
0.05	-0.18	-0.26	-0.79
0.63	0.01	-0.13	0.07
0.84	-0.19	-0.03	0.31
0.40	0.62	0.21	-0.27
-0.06	0.57	0.24	0.01
-0.13	0.63	0.02	-0.09
0.14	0.70	-0.12	0.16
0.18	0.37	0.46	-0.08
-0.05	0.18	0.01	0.09
-0.25	0.03	0.68	0.15
0.18	0.14	0.58	0.00
0.72	0.09	0.45	-0.01
-0.76	0.00	-0.24	0.07
-0.42	0.20	-0.55	0.23
0.78	0.26	0.13	-0.18
0.83	0.07	0.11	-0.33
25.32	11.21	10.12	8.52

Scotland			
1	2	3	4
0.31	0.64	0.07	-0.05
-0.05	0.67	-0.04	-0.25
0.14	-0.24	0.18	0.74
0.79	-0.18	-0.04	-0.17
0.76	0.31	-0.03	0.36
0.39	-0.09	0.57	-0.14
-0.20	-0.13	0.73	-0.23
0.11	0.03	0.50	0.00
0.09	0.17	0.26	-0.55
0.12	0.12	0.56	0.10
0.03	0.16	0.00	-0.03
-0.34	0.37	0.53	0.23
0.29	0.61	0.15	0.05
0.77	0.28	0.25	-0.03
-0.81	-0.23	-0.07	-0.07
-0.66	0.01	-0.03	0.35
0.78	0.33	0.05	0.10
0.89	0.08	0.18	0.03
28.44	10.42	10.18	7.77